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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/660,726	09/12/2003	In Hee Han	9988.055.00-US	4922
30827	7590	06/07/2006	EXAMINER	
MCKENNA LONG & ALDRIDGE LLP 1900 K STREET, NW WASHINGTON, DC 20006			LU, JIPING	
			ART UNIT	PAPER NUMBER
			3749	

DATE MAILED: 06/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/660,726	Applicant(s) HAN, IN HEE	
	Examiner Jiping Lu	Art Unit 3749	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 06 March 2006.  
 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
 6) ☒ Claim(s) 1-5 is/are rejected.  
 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \*    c) ☐ None of:  
         1. ☐ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Drawings***

1. The drawings were received on 3/6/2006. These drawings are acceptable.

### ***Claim Rejections - 35 USC § 103***

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Figs. 1-3 of applicant admitted prior art in view of Pfister (U. S. Pat. 3,327,945)

Figs. 1-3 of the current application clearly show a clothes dryer comprising a drying drum 1, a rear support 9, an inlet duct 12, a guide funnel 20, a mixing pipe 24, an igniter 26 and a fitting structure 12, 20 for fitting a guided funnel 20 to an inlet duct 12 of a gas combustion device 22-24 same as claimed. However, Figs. 1-3 do not show a fitting structure with a groove and a projection inwardly disposed on the guide funnel and the inlet duct respectively for friction fit connection. Pfister shows a flue pipe joint connector with inwardly disposed groove 60 and projection 58 for friction fit or tongue and groove fit between two different sized flue pipes 22, 20. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the fitting structure of Figs. 1-3 of applicant admitted prior art to include inwardly disposed groove and projection on connection portions of pipes as taught by Pfister in order to produce a tighter connection between two different sized pipe ends and therefore improve the safety. With regard to the claimed V-shaped groove and projection, it

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would have been an obvious matter of design choice to design the groove and projection with "V" forms, since such a modification would have involved a mere change in the shape of a component. A change in shape is generally recognized as a design consideration within the level of ordinary skill in the art. In re Dailey, 149 USPQ 47 (CCPA 1966).

4. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Figs. 1-3 of applicant admitted prior art in view of Dufour (U. S. Pat. 5,651,732).

Figs. 1-3 of the current application clearly show a clothes dryer comprising a drying drum 1, a rear support 9, an inlet duct 12, a guide funnel 20, a mixing pipe 24, an igniter 26 and a fitting structure 12, 20 for fitting a guided funnel 20 to an inlet duct 12 of a gas combustion device 22-24 same as claimed. However, Figs. 1-3 do not show a fitting structure with a groove and a projection inwardly disposed on the guide funnel and the inlet duct respectively for friction fit connection. Dufour shows a flue pipe joint connector with inwardly disposed groove 15 and projection 19 for friction fit or tongue and groove fit between two different sized flue pipes 1, 1'. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the fitting structure of Figs. 1-3 of applicant admitted prior art to include inwardly disposed groove and projection on connection portions of pipes as taught by Dufour in order to produce a tighter connection between two different sized pipe ends and therefore improve the safety. With regard to the claimed V-shaped groove and projection, it would have been an obvious matter of design choice to design the groove and projection with "V" forms, since such a modification would have involved a mere change in the shape of a component. A change in shape is generally recognized as a design consideration within the level of ordinary skill in the art. In re Dailey, 149 USPQ 47 (CCPA 1966).

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5. Claims 2, 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable Figs. 1-3 of applicant admitted prior art in view of Pfister (U. S. Pat. 3,327,945) or Dufour (U. S. Pat. 5,651,732) as applied to claims 1 and 3 as above, and further in view of Sproule III (U. S. Pat. 6,315,005).

The clothes dryer of Figs. 1-3 of the current application as modified by Pfister or Dufour as above includes all that is recited in claims 2, 4-5 except for a pipe joint connector with V-shaped groove and projection for friction fit. Sproule teaches a V-shaped pipe joint (see Figs. 5C, 5D) for friction fit or tongue and groove fit between two different sized pipe ends 84, 88. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify groove and projection of the fitting structure of Figs. 1-3 of applicant admitted prior art to have "V" forms as taught by Sproule III in order to produce a tighter connection between two different sized pipe ends and therefore improve the safety.

### ***Response to Arguments***

6. Applicant's arguments with respect to claims 1-2 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***


7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jiping Lu whose telephone number is 571 272 4878. The examiner can normally be reached on Monday-Friday, 9:00 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, EHUD GARTENBERG can be reached on 571 272-4828. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Jiping Lu  
Primary Examiner  
Art Unit 3749

J. L.